

Ma 082 ~ Geometry PreTest Study Guide

For this test, you will have to demonstrate proficiency in the following skills:

- Solving problems that require understanding of the definition of Complementary and Supplementary angles.
- Using the *Interior Angles Sum Theorem** to find the sum of the angles in various parallelograms.
- Classifying triangles according to angles and sides (equilateral, isosceles, scalene/acute, right, obtuse).
- Solving problems that involve angles formed by parallel lines (corresponding, vertical, alternate interior and exterior).
- Determining the number of lines of symmetry in a given figure.
- Classifying quadrilaterals (is it just a quadrilateral? a parallelogram? a rectangle? a rhombus? a square? or more than one of the above?)
- Using the *Pythagorean Theorem** to find the length of a missing side of a right triangle.
- Correctly placing an ordered pair on the coordinate plane.
- Using the *Distance Formula** to find the distance between two points.
- Using the *Midpoint Formula** to find the midpoint between two points.
- Finding the **perimeter** of a *triangle**, *square**, *rectangle**, *parallelogram**, or *circle** (except with a circle it is called the circumference).
- Finding the **area** of a *triangle**, *square**, *rectangle**, *parallelogram**, or *circle**.
- Finding the **volume** of a *rectangular prism**, *pyramid**, *cylinder**, *cone**, or *sphere**.
- Finding the **surface area** of a *rectangular prism**, or *cylinder**.
- Applying any of the above to a real-world situation.

**It would be a good idea to look up and write down the formulas/theorems needed for these problems and have that paper with you when you take the test.*